

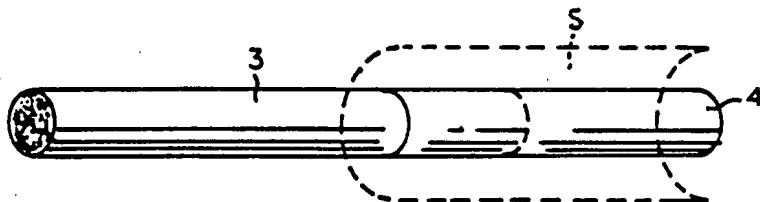
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(54) Title: METHOD OF MANUFACTURING A SMALL CIGAR, CIGARETTE AND THE LIKE, AND SMALL CIGAR, CIGARETTE AND THE LIKE MADE THEREBY



(57) Abstract

In a small cigar, cigarette and the like, a tobacco filler (1) is wrapped with a band-like element (2) which has been provided with the tobacco fire extinguishing properties. A band-like element (3/3') can connect a tobacco containing part (3) with a filter part (4) so as to serve both as an extinguisher and a connector. It also can be heatable so that a smoker can feel by its heating the approaching tobacco fire. The above described product and process eliminates expensive and complicated manufacturing mounting techniques and allows the packaging of manufactured articles in a standard pack.

Claims

1. A method of manufacturing a small cigar, cigarette and the like, comprising the steps of

providing a tobacco filler;

providing a band-like element having at least one portion which is less combustible than its remaining portion and is substantially non-combustible; and

wrapping said element around said tobacco filler so as to simultaneously provide a fire extinguisher in that when a tobacco fire reaches said one portion, it propagates inside said one portion and self-extinguishes because lack of oxygen.

2. A method as defined in claim 1, wherein said step of providing said band-like element includes providing a band-like member and attaching to it a less combustible additional member so as to form said element.

3. A method as defined in claim 1, wherein said step of providing said band-like element includes at least forming said one portion of a heatable material which is heatable by approaching tobacco fire and thereby provides an alarm for a smoker when the fire heats at least said portion and the heat can be felt by smoker's fingers.

4. A method as defined in claim 1, wherein said step of providing said band-like element includes treating said one portion so as to impart it lower combustion property than that of the remaining portion.

5. A method as defined in claim 4, wherein said treating step includes impregnating said one portion with a material imparting the lower combustion property.

6. A method as defined in claim 4, wherein said treating step includes depositing on said one portion a material imparting the lower combustion property.

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7. A method as defined in claim 1; and further comprising the steps of providing a tobacco -containing part and a filter part, and connecting said tobacco-containing part with said filter part by said non-combustible element so that the latter forms simultaneously an extinguisher and a connector.

8. A small cigar, cigarette and the like, comprising

a tobacco filler; and

a band-like element having at least one portion which is less combustible than the remaining portion and substantially non-combustible, said band-like element being wrapped around said filler, after being formed with said portions, so as to simultaneously provide a fire extinguisher in that when a tobacco fire reaches said one portion, it propagates inside said one portion and self-extinguishes because of lack of oxygen.

9. A small cigar, cigarette and the like as defined in claim 8, wherein said band-like element includes a band-like member and a substantially non-combustible additional member which is attached to said band-like member and forms said one portion.

10. A small cigar, cigarette and the like as defined in claim 8, wherein said one portion is heatable by approaching tobacco fire and thereby provides an alarm for a smoker when the fire heats said one portion and the heat can be felt by smoker's fingers.

11. A small cigar, cigarette and the like as defined in claim 8, wherein said one portion of said band-like element is treated to have substantially non-combustible property.

12. A small cigar, cigarette and the like as defined in claim 11, wherein said one portion is impregnated by a substantially non-combustible material.

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13. A small cigar, cigarette and the like as defined in claim 11, wherein said one portion is electro-chemically coated with a substantially non-combustible material.

14. A small cigar, cigarette and the like as defined in claim 8; and further comprising a tobacco-containing part and a filter part, said band-like element connecting said tobacco-containing part and said filter part with one another so as to form simultaneously an extinguisher and a connector.

15. A small cigar, cigarette and the like as defined in claim 8, wherein said band-like element is provided with a plurality of perforations at least in its front portion.

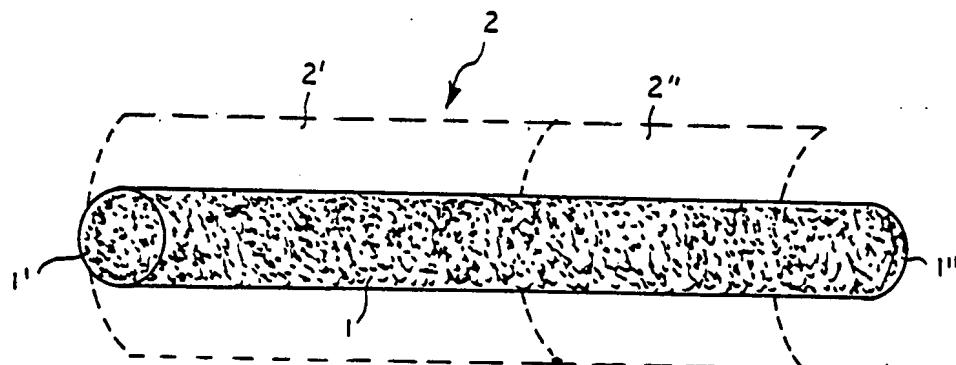


FIG. 1

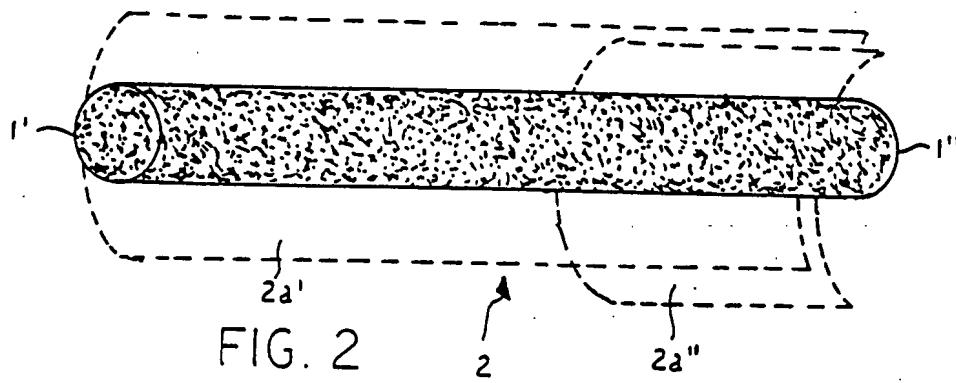


FIG. 2

FIG.3

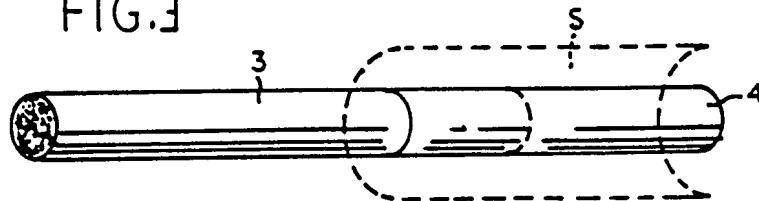


FIG.4

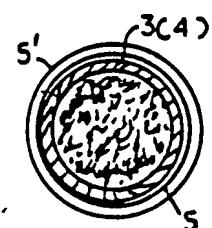
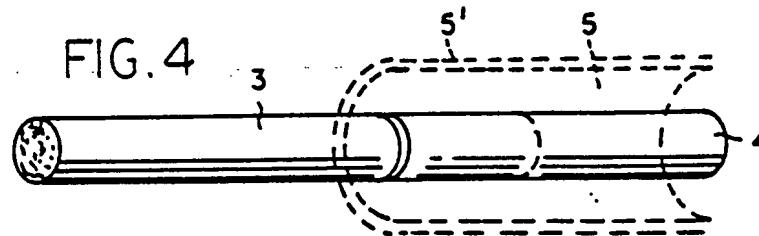


FIG.4A

FIG.5

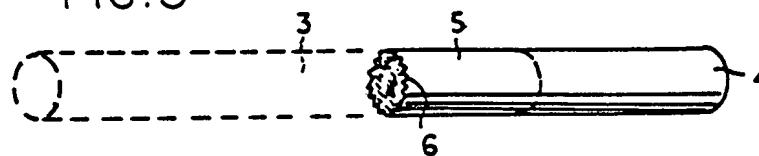


FIG.6

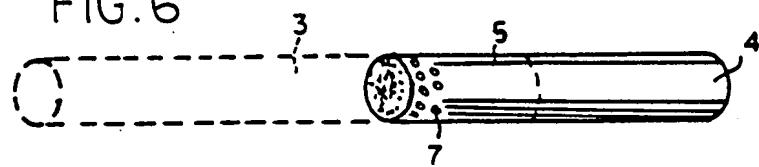
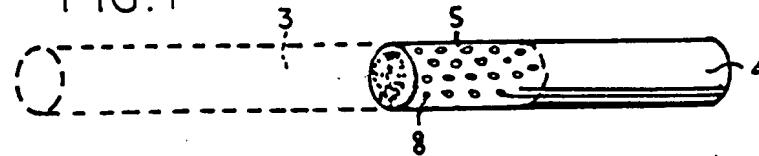


FIG.7



## INTERNATIONAL SEARCH REPORT

International Application No PCT/US85/01873

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all)<sup>1</sup>

According to International Patent Classification (IPC) or to both National Classification and IPC

Int. Cl. 4 A24D 1/10  
U.S. Cl. 131/349

## II. FIELDS SEARCHED

Minimum Documentation Searched<sup>4</sup>

| Classification System | Classification Symbols |
|-----------------------|------------------------|
| U.S.                  | 131/256, 349           |

Documentation Searched other than Minimum Documentation  
to the Extent that such Documents are Included in the Fields Searched<sup>4</sup>

III. DOCUMENTS CONSIDERED TO BE RELEVANT<sup>1,4</sup>

| Category <sup>5</sup> | Citation of Document, <sup>16</sup> with indication, where appropriate, of the relevant passages <sup>17</sup> | Relevant to Claim No. <sup>18</sup> |
|-----------------------|--|-------------------------------------|
| X                     | GB, A, 891,074, Published 07 March 1962<br>Note Figure 1, elements 12, 15 and 16                               | 1-4, 6 and<br>8-11                  |
| X                     | US, A, 2,049,320, Published 28 July 1936<br>Note Figures 1, 2, 3, and 4, elements<br>1, 3 and 4.               | 1, 2, 4-6, 8, 9,<br>11, 12          |
| X                     | BE, A, 2,140,522, Published 23 March 1972,<br>Note Figure 1, element 16.                                       | 1-4, 6-11, 14                       |
| Y                     | FR, B, 1,517,262, Published 05 February 1968,<br>Note Figures 1-4.   | 15                                  |
| Y                     | US, A, 3,586,005, Published 22 June 1971<br>Note column 4, lines 23-52.  | 6, 13                               |
| &                     | US, A, 4,243,053 Published 06 January 1981.  | 1-15                                |

\* Special categories of cited documents:<sup>15</sup>

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

## IV. CERTIFICATION

Date of the Actual Completion of the International Search<sup>1</sup>

24 October 1985

Date of Mailing of this International Search Report<sup>1</sup>

12 NOV 1985

International Searching Authority<sup>19</sup>

US

Signature of Authorized Officer<sup>19</sup>

 (Vincent Millin)